

IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strike through~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please RETAIN the claims in their present form in accordance with the following:

1. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly comprising:

electrodes formed on a substrate,

a dielectric layer covering the electrodes, and

a protective layer covering the dielectric layer and in contact with a discharge space,

wherein

the protective layer includes MgO and at least one compound selected from the group consisting of an Al compound, a Y compound, a Ti compound, a Zn compound, a Zr compound, a Ta compound and SiC, and has an ultraviolet shielding function, and

the dielectric layer is a SiO₂ film, having bonds of hydrogen with silicon as a residual in the film, of a thickness in a range of 5 to 15 μm.

2. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly of claim 1, wherein the protective layer comprises a layer which shields the dielectric layer of the SiO₂ film from light having a wavelength of 200 nm or less generated by a discharge in the discharge space.

3. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly of claim 1, wherein said at least one compound is a compound having a bandgap of 6.2 eV.

4. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly of claim 1, wherein the dielectric layer contains a hydrocarbon bond therein.

5. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly comprising:

electrodes formed on a substrate,

a dielectric layer formed on the substrate so as to cover the electrodes and made of a SiO_2 film, having bonds of hydrogen with silicon as a residual in the film, of a thickness in a range of 5 to 15 μm ,

an ultraviolet shielding layer formed on the dielectric layer and made of a compound having an ultraviolet shielding function to shield the dielectric layer from ultraviolet light generated by a discharge in a discharge space of the assembly, the compound being selected from the group consisting of an Al compound, a Y compound, a Ti compound, a Zn compound, a Zr compound, a Ta compound and SiC , and

a protective layer formed on the ultraviolet shielding layer and made of MgO .

6. (CANCELED)

7. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly of claim 5, wherein the ultraviolet shielding layer shields the dielectric layer from ultraviolet light having a wavelength of 200 nm or less.

8. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly of claim 5, wherein the dielectric layer contains a hydrocarbon bond therein.

9. (CANCELED)

10. (CANCELED)

11. (CANCELED)

12. (CANCELED)

13. (CANCELED)

14. (PREVIOUSLY PRESENTED) An AC type gas discharge panel comprising:

a front substrate having display electrodes;

a dielectric layer covering the display electrodes, the dielectric layer having a thickness in a range of 5 to 15 μm , and being a SiO_2 film having bonds of hydrogen with silicon as a residual therein;

a back substrate having a phosphor;

a discharge space between the front substrate and the back substrate and having a discharge gas sealed therein; and

an ultraviolet shielding layer formed on the SiO_2 film and containing a compound which shields the SiO_2 film from ultraviolet light generated by a discharge in the discharge space and is

selected from the group consisting of an Al compound, a Y compound, a Ti compound, a Zn compound, a Zr compound, a Ta compound and SiC.

15. (PREVIOUSLY PRESENTED) An AC type gas discharge panel comprising:
a front substrate having display electrodes;
a dielectric layer covering the display electrodes, having a thickness in a range of 5 to 15 μm , and being a SiO_2 film having bonds of hydrogen with silicon as a residual therein;
a back substrate having a phosphor;
a discharge space between the front substrate and the back substrate and having a discharge gas sealed therein;
a protective layer covering a surface of the dielectric layer facing the discharge space and made of MgO ; and
an ultraviolet shielding layer formed between the SiO_2 film and the protective layer, wherein the ultraviolet shielding layer shields the dielectric layer from ultraviolet light generated by a discharge in the discharge space and contains a compound selected from the group consisting of an Al compound, a Y compound, a Zn compound, a Zr compound, a Ta compound and SiC.

16. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly comprising:
electrodes formed on a glass substrate;
a dielectric layer made of a sheet frit glass formed on the substrate by baking, being a SiO_2 film containing bonds of hydrogen with silicon as a residual therein, and having a thickness in a range of 5 to 15 μm ;
an intermediate layer formed on the dielectric layer and shielding the dielectric layer from vacuum ultraviolet light generated by a discharge in a discharge space of the assembly, the intermediate layer being made of at least one compound selected from the group consisting of an Al compound, a Y compound, a Ti compound, a Zn compound, a Zr compound, a Ta compound and SiC; and
a protective layer covering the intermediate layer and made of MgO .

17. (CANCELED)

18. (PREVIOUSLY PRESENTED) A gas discharge panel substrate assembly of claim 16, wherein the intermediate layer is a ZrO_2 layer.